

## **EPA technical questions regarding Tetra Tech – Updated 5/23/2016**

It would be helpful to all the agencies, including in communication with the public, to understand the Navy's factual information, with technical details, related to topics such as the following:

1. If, hypothetically, the previous RASO/Tetra Tech investigation of anomalous samples had missed any areas where contamination should have been removed, what would be the potential threats to human health and the environment currently?
  - a. Calculate estimates of the risk to nearby residents and workers (past, current, and future for both) of a hypothetical scenario in which the Navy missed falsified samples and contamination is left in place above EPA's acceptable risk range. For example, as part of Tetra Tech's earlier internal investigation, after resampling in 386 locations, it did 3 more removals after discovering levels higher than originally presented. Make realistic assumptions about actual concentrations and actual exposure pathways (e.g., durable cover, restrictions against growing food, etc.). Present the breakdown of risk by pathway (e.g. inhalation, ingestion, etc.).
  - b. What are multiple lines of evidence, collected independently of Tetra Tech, that could give other indications related to potential exposure? For example,
    - i. What are descriptions of and results from routine worker protection measures in Radiologically Controlled Areas (RCAs), e.g., scanning, dosimeter badges, etc.?
    - ii. As an indication of potential exposure through dust to the broader community, what were air monitoring results for radionuclides from RCAs?
    - iii. What were results from scanning by portal monitors when leaving the Base and arriving at landfills?
    - iv. After Tetra Tech's work in trenches, has the Navy or any other independent entity, scanned potentially affected areas? On 3/24, Derek wrote "Mainly, scanning was used to confirm that remediation was complete, identify areas needing remediation, and to clear soil for reuse or disposal. Large areas, such as all of Parcel G were not scanned prior to placement of the soil cover." Was this scanning done by Tetra Tech or by the Navy or another independent party?
    - v. Does the Navy know of any other lines of evidence that could provide indicators of potential exposures to the public of levels of radiation that would not be protective?
2. Tetra Tech already had to go back and do new removals in three locations as part of its internal investigation. Could Navy and contractor workers conducting excavation have been unknowingly exposed to soil at concentrations above release criteria in these or any other locations? For example, areas assumed to be already clean would no longer be considered Radiologically Controlled Areas (RCA's), so workers would no longer be required to go through the usual protections, e.g. hand scanning hands and shoes as people exit the RCA, wear dosimeters while inside the RCA, etc.
3. Were the Tetra Tech EC, Inc., contract payments fixed price or time and materials?

4. Please give more details of Navy's current increased oversight of Tetra Tech day-to-day. For example, please provide workplans of the oversight contractors, requirements of current permits for radiological work, and descriptions of the oversight practices of the Navy's RASO, BRAC, and ROIC staff. Please also give a brief description of the oversight roles of the NRC, CDPH, and any other regulatory agencies.
5. What additional work, either analysis or actual field work, could the Navy do to increase confidence in the protectiveness of its cleanup before Parcels could be verified to be appropriate for transfer? For example, will the Navy independently collect soil samples to verify that its previous data reviews have not missed any areas where samples could have been falsified?

Questions regarding Mr. Anthony Smith's allegations:

6. What are the locations of the samples that were not properly analyzed that Mr. Smith observed? Did this area include the area where the Artist Studio is to be built? Did these locations include any that were not already caught in the earlier Tetra Tech investigation?
7. Did Mr. Smith know of other area where samples were falsified beyond his own work areas? How widespread did he believe this practice to be?
8. What motivation does Mr. Smith believe TetraTech might have to falsify samples?
9. Other than confirmation sampling, did Mr. Smith observe other aspects of radiation cleanup where improper activities occurred, e.g. scanning of excavated soil in Radiation Screening Yards, scanning after excavation, scanning of workers as they left Radiologically Controlled Areas (RCA's)?
10. How did Tetra Tech field supervisors determine which areas were likely to have lower levels of contamination?
11. Which open trenches did Mr. Smith observe hiding of unanalyzed potentially contaminated samples? Only storm drain and sanitary sewer line excavations? Or other areas too? How deep did he observe the contaminated samples were placed? How many samples did he believe were discarded inappropriately? Were they placed in a concentrated location or spread out?